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A set of well-filled book shelves: while the inveterate old man, of Yorkshire hating shows that the family will not change for a day or two at any rate. It often happens that the father pays into a building society until the home he lives in becomes his own.

Bradford has had a very interesting history. During the Civil War (1642-1649), Bradford was on the side of the Parliament. The Royalist garrison under the Earl of Newcastle attracted to town, when the parish church was used as an hospital for the wounded, the women helping in the expedient of transpiling wool packs round the towers to receive the shot of the enemy. Yorkshire was, for the most part, on the King's side, but the two Fairfax, Lord Fairfax and his son, Sir Thomas, who belonged to an ancient Yorkshire family, fought valiantly against the royal forces and to command of the Earl of Newcastle. Sir Thomas Fairfax has left an account of the actions in which he & his father were engaged, containing interesting particulars with regard to the towns of Leeds & Bradford. Now, for instance, "the Earl of Newcastle needed not to raise batteries (about Bradford), for the hills commanded all the town;" how amongst the prisoners, was "my wife; the friend behind whom she rode being taken; and, "my daughter, not being above five years old, being carried before her maid, endured all this street on horseback." (20 hours, to Selby, in Hull, 11.42.)

So close to Bradford as almost upon par with the town are the now more ironworks, known all over the world for the great strength & stoneness of the iron goods produced in them - iron plates, bars, rails for railway lines - the best in the world, which are sent to America, Egypt, India, Russia

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Russia; whenever the stamped iron goods are wanted
the Saville brand is known. By night the foundry
is to be seen from afar by the light of the huge blast
furnaces, blazing away like small volcanoes, to
reach the works, you cross a wilderness of barren
circles 'islay', the region of the furnaces, which,
for nearly a century, has been collecting in
hillocks over the place. The peat-iron-works,
which employ some 4,000 men, rest upon the
north-west corner of the coalfield, where there is much
ironstone lying in seams, sometimes open
inches thick, sometimes several feet.

An interesting little township of Saltair lies within
two miles of Bradford: everyone knows its history,
etc etc, related by Dickens, of how a certain
Yorkshire manufacturer, with little money to spare,
sent his sons to Liverpool to buy wool, how, at that time,
her lay in the yards of Liverpool merchant - many
odd little bales of "queer looking stuff" which no one
would buy. People came turned it over & left it
where it was, & the merchant - did not know what to do
with the 'nesty stuff' which had been sent to him
from South America. Now, by a happy chance, the
young Yorkshirer turned into this merchant's
yard, pulled out a handful from the open corner of
a bale, "felt at it, smelt at it, did everything but
taste it," & carried away a sample in his pocket, -
brought very soon string up every bale of the useless
stuff. By & by, people heard of a new material
called alpaca, a shiny, silky, cool stuff, most
pleasant for summerwear. This was what Mr. this
gent had made of the odd looking dirty wool he had
picked up in that Liverpool yard. It was to soft fine
silky wool - brown white or black - of the alpaca, a beautiful
color

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the Wolds are almost - destitute of trees. The few miles of chalk were - or pretty worn by the action of the waves with crop ~~herbs~~ ^{grass} & ~~grass~~ ^{reeds} & ~~reeds~~ ^{canes}.
The few streams of the Wolds are fed by intermittent springs, like the levants (relavants) of the South Downs: these are called "fippies" (head & g). Flint & chalk, italy as the minerals proper to the chalk.

Holderness, which lies without the chalk escarpment we have spoken of, stretching from Flamborough Head to Beverley upon Beverley to Hull, has also an interesting geological history. ~~It~~ It is covered with boulder clay ~~soil~~ ^{hard & dark} ~~deposits~~, ^{angular} & ~~fragments~~ ^{such as} ~~found~~ ⁱⁿ situ in Norway, Scotland & northern England. Geologists are agreed that this boulder clay marks that is called the glacial epoch; that the irregularities in the boulder clay are due to the fact that northern England was, at three different periods, as completely under an ice covering as is Greenland at the present day. But the boulder clay is overlaid ^{in many places} by alluvial deposits - peat, sand, &c. & these are due not merely to the ~~flowing~~ ^{flowing} of rivers, but to the silting up of passes ^{of mere} which originally bordered the coast. Then, Hornsea Firth is the only one still in existence as a shallow lagoon, though it is low. Holderness is not a level country, except to the south, where now is a good deal of marsh land reclaimed from the sea. The structural history of this district is not confined to rewash. From Bridlington & Spurn Head the land is retreating ~~begin~~ to ~~see~~ at the rate of two yards a year; that is, a strip some six feet wide is carried away from the coast annually. ~~down~~

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villages, churches, grave-yards, have been carried away
bit-by-bit, & have never, once perhaps, a considerable
part, when once of Nottingham landed, has been
lost-broadly, leaving nothing of its whereabouts
beyond a surmise that it - was somewhere
near Spurn Point. Spurn Point itself, &
the Bents, as the ridge is called, which connects
it with the mainland, is no more than a sandbank
but within the Point - new lands are being
laid down formed of the material which the
Sea has just stripped from the coast-bethes
with the mud brought down by the Humber. The
wide mud-flats are laid down on great
interred as cheering State-land in the very
process of making.

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up under glacial influences, others, ~~post~~ ^{then} rain acting on the softer parts of the rock in the exposed boulders have produced these strange forms.

Nearly three centuries ago, a discovery was made in Didsdale which drew people in great numbers, but it was then a bleak common, soon Harrogate sprang up, the oldest, & still the most fashionable inland watering place of the north. In 1596, the first Spa was discovered by Sir William Shrigley, who had travelled much in Germany & was familiar with the virtue of the continental Spas. Few now, however, such springs are now known, all more or less bristled with iron or sulphur. The water of the chalybeate springs are bracing; those of the sulphur springs are valuable in nervous disorder in cases of indigestion. Harrogate has its pump room, promenade, gardens, &c., the usual attractions of a watering place; but its greatest attraction is the fine, pure moorland air it enjoys.

On the opposite bank of the Foss, ~~stands~~ is here a broad full river, rises the ruined towers of Knaresborough Castle, standing on a high cliff overhanging the sides, overlooking the town of Knaresborough, which is now beautifully placed than any town of Yorkshire excepting Richmond. ^{In a dungeon of} ~~In~~ this castle, the murderers of Becket remained in hiding for a year after the commission of their crime: in the King's Chamber, Richard II. was confined, before he was taken to Pontefract. A. during the Civil War, the castle sustained a siege from the Parliamentary forces under Lathom. Knaresborough was one of the most important towns in the county. In one of the alleys on the bank of the Foss, ^{the} ~~now~~ ^{as} has a twofold interest, first

as the dwelling of the holy hermit, St. Robert, to whom even
King John was constrained to do honour; & a less
& less pleasant interest as to some of the murder
committed by Eugene Aram.

Wharfedale.

Of the two fair sister valleys which form the Learney
of Heaven - the upper valley of the Aire, the Ribble, & the
Wharfe - Wharfedale is by far the loveliest. It is the
most secluded, too; for the railway ends at Ilkley,
you may walk the highway for half a day in the
upper valley without meeting a second passenger.
Anglers, indeed, find their way up, & stop at the village
inns, for the river is famous for its trout. The
general credit of Wharfedale suffers from the very fact
that it contains Bolton Woods, as lovely a spot as
there is in the country; but the whole of the upper valley
is park-like; everywhere is a broad bottom of lawn-
like pasture, finely sprinkled with trees - ash,
M. & yew, &c. for the most part. Through such
the Wharfe winds between wooded banks, & here &
there, the falls draw up to the river's brink, now
on this side, now on that. Broken forest patches
stretch all along the falls, creeping now & then
into the ~~valley~~ bottom, the remains of a forest which
once covered the whole upper valley; & in the
clearings, are green stretches of high pastures;
while, above the lower falls, grow the dark thorns
of the grit moors. Below Ilkley, you come
upon the inevitable mill chimney of the West
 Riding, but, above that charming watering place,

a compleat river-system, a main stream with many affluents discharging almost the whole drainage of the County into a single noble estuary; & all this, within the limits of Yorkshire itself. It would be easy to show that civilisation has followed the courses of the rivers; that, in their valleys, we planted the great religious houses, the centres of medieval civilization; & in their valleys, are the great industrial centres of to-day. Now is this all. It is not too much to say that its rivers have made Yorkshire; that they have scooped out the habitable places of the earth, & then have spread them with alluvial soil, able to bear forth for man & beast. This is true with ^{the} limitation of the great central valley; no doubt there was low land between before the rivers began to flow—a wide plain, if not a valley: but of the beautiful dales of the West & North Ryedings, we may believe that the rivers have carved them out as truly as that they have embellished them. Of these, as of other river valleys, the words of Huxley might receive; "that, in point of fact, the present rivers have gradually scooped out their own channels, & that our river valleys are, mainly, the result of work performed by rain, rivers, & similar agents of denudation."

Yorkshire people rejoice in the fact—that no English county presents greater varieties of pictorial land-scapes than their own. True 'picturineness' is common—the result of the juxtaposition of the old wild with the soft & lovely; & in Yorkshire, such juxtaposition is of continual occurrence: every town has a man about in a smiling valley; the bottom of the valley is broken up by a limestone scar, providing a girded keep. It is a case of what's bred in the bone must out in the flesh; the character of the landscape depends upon the nature of the surface rocks; the variety of the landscape, upon the fact that very various strata come to the surface. ^{it is} ~~the~~

it is impossible to get a lucid idea of the geography of Yorkshire without some knowledge of its geology; & it is only as we know something of the structure of its several rocks, & of their behavior under atmospheric influences, that we have any explanation to offer of the distinctive features of Yorkshire - bell & force, cavern, cone, & scar.

Perhaps nowhere in the world is the geological history of a region more clearly marked than in Yorkshire. - First, in order of time, & highest in elevation, we have the Western Mors, the Pennine Chain of the geologists, a more or less mountainous tract some ninety miles in length, with an average breadth of thirty miles. Here appear the patriarchs of Yorkshire rocks - the Silurian & Carboniferous slate.

Then, stretching through nearly the whole length of the county, but with a breadth narrower than from 10 to 15 miles, we have a band of Permian rocks.

Next: succeeds the broad Vale of York, where the original rocks (of the first series) are covered with the deposits of the rivers - mud, peat, sand, silt, gravel, clay - but it is these which give character to the landscape, etc. Whole plain is an alluvial valley.

hitherto the bands of distinctive strata have occupied the whole length of the county from north to south; but eastern Yorkshire did not appear all at one sudden. In same conditions, traverse the county from River to Spurn Head, & you pass through four regions, with widely different landscapes, marking widely different geological conditions.

Now, following still the order of time, & beginning at the north, we have first: the North-eastern Morslands, with vegetation not unlike that of the Western Mors, though supported on rocks of far more recent origin. Going south, we cross the Vale of Pickering, verdant & fertile, its surface rock being boulders, clay of glacial origin. Next succeeds the chalk of the Wolds, & last, Holderness, consisting of recent deposits, the debris of the rest of the country.

- Sinctly as the landscape. Therefore, the agricultural manufacturing industries of a district connected with its geological formation, that Yorkshire may be roughly parcelled out into some six or seven series of landscapes corresponding with the geological division we have indicated.

The Silurian rocks, infinitely the oldest - series which Yorkshire exhibits, appears in or two places only. You are surprised to see open quarries of bluish-green slate in the neighbourhood of Appleton, & again, to the north of Selby, the same hard rock appears.

The Mountains - or Carboniferous - Limestone forms a district of singular beauty - peculiar character in the north-west of the county. Fox, Lavel, Rye, Wharfe, Aire, Wharfe have all cut much of their upper valley out of the solid limestone, their upper courses give opportunity to study the characteristics of limestone country. Upper Wharfe, from below is, perhaps, the most beautiful of the most characteristic of these valleys. Like the Lee.

The Wharfe is -

"Condemned to run a channell'd way
Through to solid sheets of marble grey" -
& the clear brown waters, (brown from the peat-moss when they rise) course through a clear swept-channel paved with grey slabs. Every now & then, boulders break the current & bring the waters into play, then, the pale hue of the rock is set off by dark drapery of the rich domes, alders hang over the stream, a little higher, as hazel thickets with birch, sallow; & in the woods sheltering the limestone hills above, the cold grey-green of the ash is the prevailing tint. A special feature of the limestone country is the lovely lawn-like meadows pastures which fill the lower valleys, for it is the property of the limestone to bear a close, short, vividly green turf. The flowers are very abundant - slender - the hand-sown purple wild geranium, meadow campion, rock cress, several species of forget-me-not, yellow pansy, many more. The beauty - variety of the mosses, lichens, ferns, is another feature of the limestone country you may find, and in natural pastures, between the limestone slabs

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cliffs on many a hill-top, the limestone poly-poly, the green spleenwort, the black maiden-hair spleenwort, the scale fern, the common harts-tongue, in fact, all the ferns proper to the limestone, very abundant & beautiful, every plant perfect & delicate in hue as if reared under glass.

The great thickness of limestone which overlies this part of Yorkshire is not to be thought of as one solid rock: on the contrary, it consists of an infinite number of layers of varying hardness; here, a rock close & solid as marble, overlying another of loose coarse texture. Now, rain & dew, snow & hail, atmospheric moisture in whatever form, is laden with carbonic acid, derived from the air itself, or from decaying vegetable matter: & water containing carbonic acid in solution has the property of actually dissolving the limestone, & not merely wearing it away. How the carbonic acid acts is open to discussion; but the fact remains, & does much to account for the scars, the caves, the potholes, the underground streams, the fantastic rock forms of this district. Add to this, the common effect of weathering upon rocks of unequal hardness known as karren: how the water percolates the softer, looser, shale, breaks, shaws, swells, turns the rock, not holds it as it might hold a pallet, leaves a picnic exposed to the further action of the atmosphere, which is for ever wearing away, as well as discoloring, the yielding limestone, more of

This is the history of the fine scars, which stand like many fortresses up & down the Wharfe valley. Dipping water has found its way through the loose joints, carbonic acid in solution has eaten out a way through denser layers, debris, broken off by the one course as the other, has fallen to the base of the cliff, until now it stands, a rounded bare face of limestone, with harder layers standing out like courses of heavy masonry, steep as the walls of a castle.